

dispensers. A lower “hazardous zone” compartment in the dispenser cabinet contains fuel valves and other fuel flow components that may generate hazardous fuel vapors, and an upper compartment, or “safe zone”, contains electronics of the system. No specific organization or mounting is disclosed for these electronics, and their locations are not limited to the upper compartment. For example, at Col. 6 beginning at line 39, “the upper section 64 includes a main dispenser display panel 74 located approximately in the middle of the upper portion between two relatively large openings”. Thus, the display for the dispenser is not located in any compartment, but to the door itself. Further, beginning at Col. 6 line 20 is described mounting of “one or more fuel description panels...” that comprise “some type of displays which are mounted to the slots rear of the intermediate section behind corresponding slots therein”. As such, it should be clear that computer displays for the fuel dispenser are mounted to the door in at least two separate locations. Further yet, no interlock mechanism is disclosed to de-energize the electronics when the door is opened, or to energize the electronics when the door is closed.

The reference to Anderson, relied on to show “mounting of components to a front panel which defines a removable module”, provides a fluid dispensing system wherein, like the reference to Day, some of the electrical components are mounted to a “cover member 32 is couplable to the housing 12 for covering the opening 18 in the forward face 19 such that the control assembly 20 is covered to prevent unauthorized access to the control

assembly 20". It is particularly noted that the "control assembly 20 is mounted within the housing behind the cover (Fig. 4), and further includes "a computer controller 59" (Col. 5 lines 26 – 27). On the other hand, to the cover is mounted "a display panel 70 is coupled to the cover member 32 and is operationally coupled to the control assembly 20..." (bottom of Col. 5). Also, "a currency collection assembly 50 is operationally coupled to the control assembly 20 such that the control assembly 20 dispenses the vehicle fluid..." (Col. 5 lines 2 – 4). The "currency collection assembly 50" is mounted to cover member 32 (Fig. 4). Thus, like the reference to Day, the computer controller is mounted in the dispenser behind the door or cover, and other electronic components are mounted to the door or cover. Significantly, it is noted that there are no electrical interlocks in Anderson that electrically disconnect any components on the cover 32 when the cover is removed.

Applicant's claim 1, as amended, provides the components noted by the Examiner of "a fuel dispensing cabinet" and a "fuel flow system in said cabinet" as generally found in Day. However, the arrangement of Applicant's fuel flow system of claim 1, comprising "a removable module in said fuel dispenser cabinet, with said computer display, said computer, said electrical pump control circuitry, and said power supply circuitry mounted in said module, said module electrically coupled to said fuel flow system when inserted into place and electrically disconnected from said fuel flow system when removed" is not taught, suggested or inferred by Day and Anderson, taken

together or separately. Initially, as noted, the “displays” of both Day and Anderson are mounted to the door or cover, while the respective computers and flow control systems are mounted within the enclosure, separate from the door or cover, and none of which being integrated and mounted in “a removable module” as disclosed and claimed by Applicant. As such, the various electrical components of Day and Anderson are mounted separately, some on a door or cover, others within the housing, while these same electronic components of Applicant are operatively mounted together in “a removable module in said fuel dispenser cabinet” (underlining added). Further, the module and fuel dispenser are configured so that when the module is inserted or removed into/from the fuel dispenser, the module is automatically electrically connected or disconnected to/from the fuel flow system. As such, all the electronic components for Applicant’s fuel delivery system may be replaced simply by removal of a defective module and replacement of a new or reconditioned module. These features are not found in any form in Day and Anderson, taken together or separately.

Applicant respectfully submits that the Examiner is injecting his own opinion with the statement that “Anderson teaches the mounting of components to a front panel with [sic] defines a removable module”. Further, the Examiner’s statement that “it would be obvious to one skilled in the art to modify Day to mount its components to a module like that taught by Anderson because it makes maintenance of components easier” is inaccurate. There is

no reason to believe, nor has the Examiner demonstrated, that one skilled in the art, given the references of Day and Anderson, would develop “a removable module in said fuel dispenser cabinet” wherein the electronic components are mounted therein, operatively connected together and easily replaceable. Such a construction can only be arrived at through the use of improper hindsight reconstruction using Applicant’s own disclosure as a guide. Further, since it would appear that the degree of difficulty of maintenance of electronic components in both Day and Anderson is approximately the same, and since the Examiner has not shown how maintenance would be easier if combined, there would be no motivation or advantage by one skilled in the art to combine Day and Anderson as suggested by the Examiner.

For reasons noted above, it is respectfully submitted that the rejection to claim 1 is defective, and should be withdrawn.

Claims 2 – 4 and 10 are rejected over the addition of the reference to Flannery to Day and Anderson. Flannery teaches an adapter for a computer floppy disk drive into which a floppy drive is latched, after which the adapter may be inserted into a CD rom drive bay of a laptop computer.

Applicant’s claim 2 defines a composite invention including all the limitations of claim 1, and adds the further limitation of a “slide apparatus upon which said module is slidably mounted to said fuel dispenser”. Upon a

careful reading of the reference to Flannery, no such “slide apparatus” is found. Rather, the floppy drive is inserted and latched into the adapter, and the adapter is inserted into the laptop in the same manner as a square peg is inserted into a square hole. No “slide apparatus” as claimed by Applicant is necessary in Flannery due to the small size of the floppy drive and the adapter. In addition, while one skilled in the art, given the references of Day, Anderson and Flannery, might mount each of the components in a respective adapter as taught by Flannery, there is no teaching of mounting several or all the electronic components together in a module for convenience of replacement. Such a teaching is derived only from Applicant’s own disclosure. It is also noted that the addition of Flannery to the references of Day and Anderson does nothing to cure the defects with respect to Day and Anderson. For these reasons, the rejection of claim 2 is defective, and should be withdrawn.

Claims 3 and 4 define composite inventions containing all the limitations found claims 1 and 2, and further add provisions, as amended, for aligned electrical connectors in the back of a recess of the fuel dispenser within which Applicant’s module is mounted in order to electrically connect/disconnect the components mounted in the module when the module is inserted/removed from the recess.

As claims 3 and 4 depend from a base claim believed allowable (claim 1), claims 3 and 4 should be found allowable upon claim 1 being found

allowable.

Independent claim 10, containing all the components of claim 1, and additionally including a card reader mounted in the module, with the components coupled together in operative relation, and wherein one side of the module is configured for use by a customer, should be allowable over the references of Day, Anderson and Flannery as noted above with respect to claim 1. In addition, while Anderson teaches a cover to which some electrical devices are conveniently mounted, Applicant's claim 10 provides "a recess in said fuel dispenser for slidably receiving said module" (underlining added). As such, Applicant's module is sufficiently large so as to contain the electronic components of the fuel dispenser, and is not merely a cover to which some components may be conveniently attached. As such, the rejection to claim 10 is defective and should be withdrawn.

Claims 5 and 11 are rejected over Day as modified by Anderson and Flannery, and further in view of Bohnert.

Applicant's claim 5 provides a composite invention including all the limitations of claims 1 - 4, and further adds the limitations of a "plurality of fuel dispensers", "a card reader and receipt producing device in operable relation to a customer in each removable module...", and "a communications network coupling each said computer in each said fuel dispenser together and

to a site controller via each respective said first connector and an associated said second connector...”. Claim 11 similarly provides “a plurality of said fuel dispensers in a single location, with a communications network coupling said plurality of said fuel dispensers via selected ones of said first electrical terminals and corresponding ones of said second electrical terminals to a site controller configured for coupling sales transactions from said plurality of said fuel dispensers to the internet for completing said sales transactions.”.

The reference to Bohnert et al shows a plurality of fuel islands each having fuel-dispensing pumps, with an island transaction terminal on each island. Nothing in Bohnert et al cures the deficiencies with respect to Day, Anderson and Flannery as discussed with respect to claims 1 and 10. As such, claims 5 and 11 should be allowable.

Claims 6, 7, 12, 13 and 17 are rejected over Day/Anderson/Flannery/Bohnert, and further in view of Ramsey.

Claim 6 provides a composite invention including all the limitations of claims 1 - 5, and adds the further limitation that “said site controller is located in a said computer of a respective one of said fuel dispensers...”. Claim 7 provides a composite invention including all the limitations of claims 1 - 5, and adds the further limitation wherein “configuration information for said plurality of fuel dispensers is stored in one said computer of a respective said fuel

dispenser, and transmitted over said communications network to a said computer in a said fuel dispenser requiring said configuration information.”. Claim 12, similar to claim 6, provides a composite invention including all the limitations of claim 10 and 11, and provides the additional limitation of “locating said site controller in a one of said fuel dispensers for autonomous operation of said plurality of fuel dispensers.”. Claim 13, as amended, provides a composite invention including all the limitations of claims 10 - 12, and adds the further limitation thereto of “a non-volatile memory storage device coupled to a said computer in a respective said fuel dispenser and containing at least configuration data for said module of said respective said fuel dispenser.”. Independent claim 17 defines an invention containing all the limitations of claims 1, the card reader and receipt producing device of claim 5, the module containing all electronic components coupled together and configured with a front side as the front of the fuel dispensing cabinet in customer-usable relation, and the limitations of claims 8 and 13.

The reference to Ramsey is relied on to show an automated system in conjunction with a facility, such as a convenience store in one embodiment and “a secure control building” in another embodiment. In both these embodiments, the site controller is located remotely away from the fuel dispensers, requiring a separate building in addition to the fuel islands.

Applicants claim 6 incorporates the site controller in one of the

computers of a respective fuel dispenser, a feature not found in Ramsey et al, and which eliminates the need expressed in Ramsey for a separate building in which to locate the site controller. This feature of Applicant's system allows for a totally autonomous fueling facility without any kind of separate building. Claim 7, incorporating configuration information for all the fuel dispensers in a computer of one of the fuel dispensers, is also a feature not found in Ramsey since the configuration information for the fuel dispensers of Ramsey is stored remotely in a server located in a separate building. Further, since claims 6 and 7 depend from a base claim believed allowable, claims 6 and 7 should also be allowable.

Claims 12 and 13, similar to claims 6 and 7, should be allowable for reasons set forth with respect to claims 6 and 7. Also, since claims 12 and 13 depend from a base claim (10) believed allowable, claims 12 and 13 should also be allowable.


Independent claim 17 includes the limitations of claim 1, and thus should be allowable for reasons as previously set forth with respect to claim 1 over the references of Day, Anderson, Flannery, Bohnert and Ramsey. In addition, claim 17, as amended, provides that configuration data for the fuel dispenser be incorporated in a non-volatile flash memory "so that said configuration data may be removed from a defective said computer and re-installed into a replacement computer by disconnecting said flash memory

from said defective computer and connecting said flash memory to said replacement computer.”. No such feature is found in the combination of Day/Anderson/Flannery/Bohnert/Ramsey.

Claims 8, 9, 14-16 and 18-20 are rejected over Day/Anderson/Flannery/Bohnert/Ramsey, and further in view of common knowledge exemplified by the reference to Horn, which generally mentions use of flash memory cards for storage of data related to a crack prediction system for a nuclear reactor.

With respect to claims 8, 9, 14-16 and 18-20, which relate to use of flash memory, it is noted that flash memory may commonly be used in the server of Ramsey or the central master terminal 19 of Bohnert, corresponding to use of a flash memory in Horn. However, use of a flash memory in a fuel dispenser computer, as disclosed by Applicant, and in conjunction with modular electronics as claimed by Applicant, allows an untrained individual, after changing the electronics module of a fuel dispenser, to configure the fuel computer just by removing the flash memory from the defective module and plugging it into the replacement module. No such feature is found in any of the prior art related to fuel dispenser computers, nor have others in the art devised such a system, in spite of the long-felt needs to develop such a system. In addition, since claims 8, 9, 14-16 and 18-20 depend from base claims believed allowable, these claims also should be found allowable.

As the rejections raised by the examiner are believed to be obviated with this amendment, favorable action is respectfully requested. No new matter is added by any amendments herein, and no amendments are made to the claims that would require a new search. A petition for a 1 month extension of time is attached herewith along with a check in the amount of \$60.00 to cover the cost of the petition. If there are any outstanding issues to be resolved, a telephone call from the examiner is solicited.

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